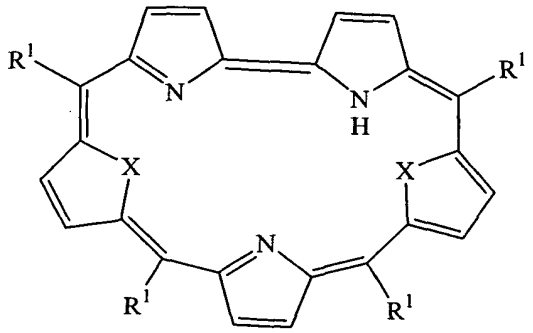
Claims

1. An expanded porphyrin or a conjugate thereof comprising at least five pyrrole rings or pyrrole mimics wherein at least two NH moieties contained in said pyrrole rings or pyrrole mimics are replaced by S, Se and/or Te; said replacements occurring in non-adjacent pyrrole rings or pyrrole mimics;

wherein said expanded porphyrin is substituted with at least one moiety which is cationic under physiological conditions; and

wherein said porphyrin may optionally be substituted by one or more non-interfering substituents and one or more carbons contained in a pyrrole ring may be replaced by O or S.

2. The expanded porphyrin or conjugate of claim 1, wherein the expanded porphyrin is of the formula



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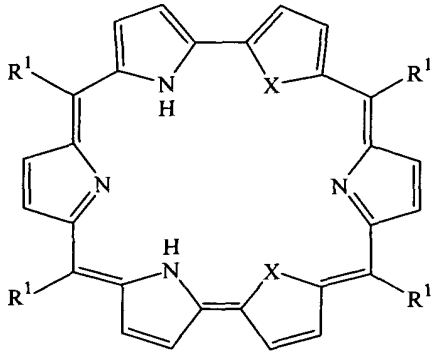

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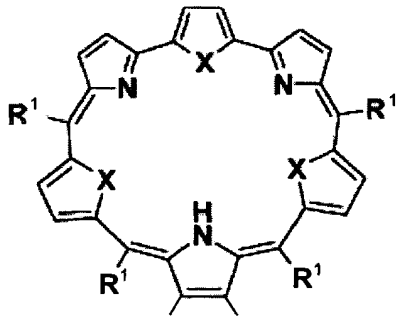

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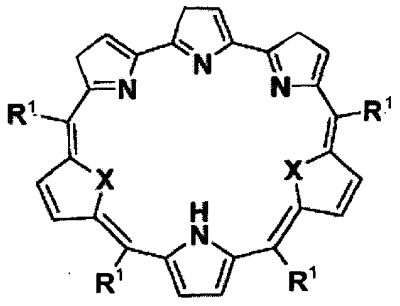

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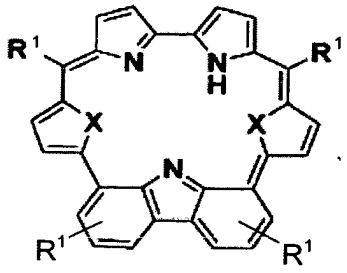

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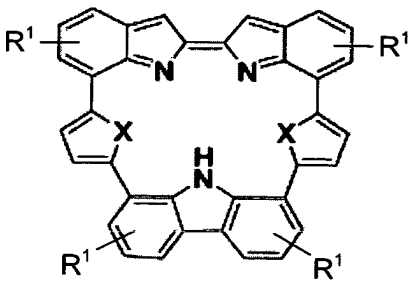

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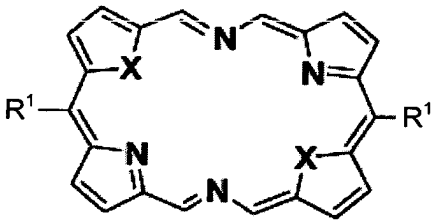

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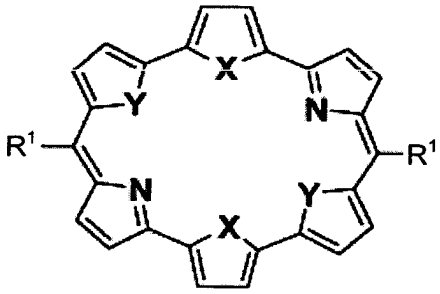

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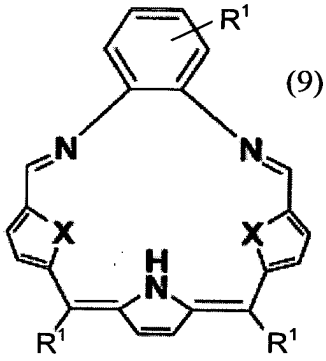

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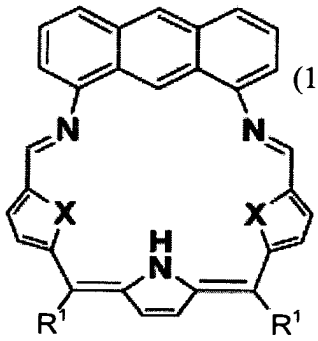

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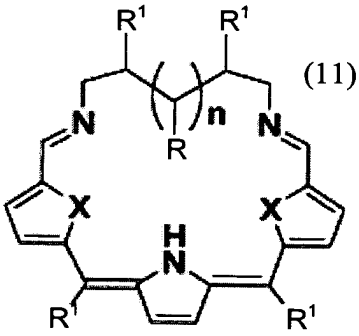

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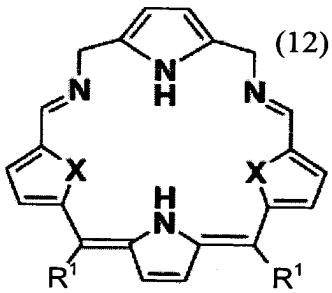

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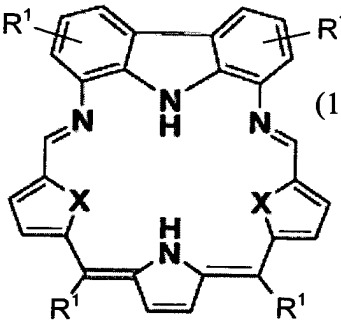

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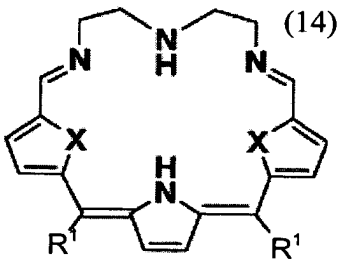

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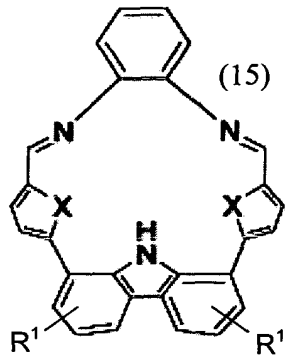
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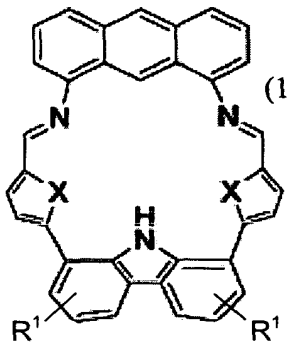
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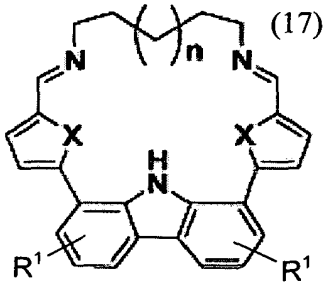
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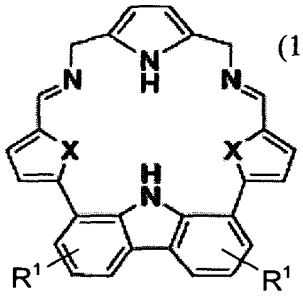
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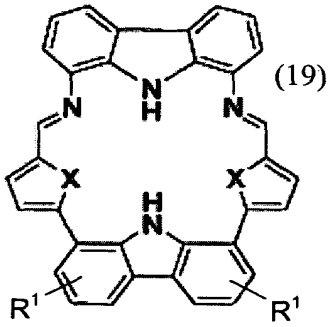
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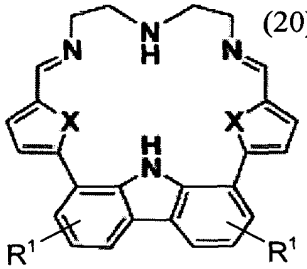

(20)

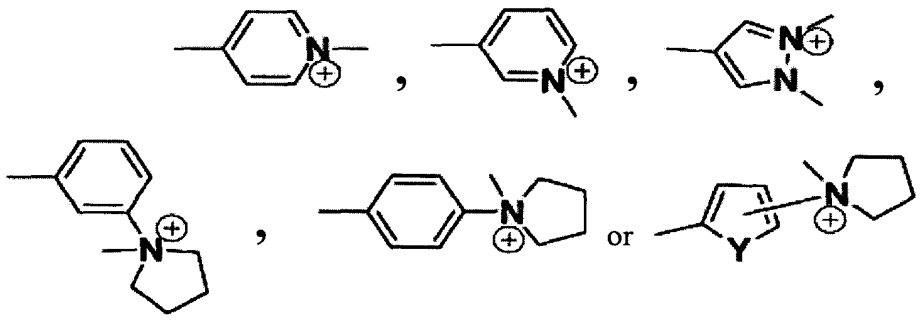
,

wherein at least one R^1 comprises a substituent that is in cationic form at physiological pH; the remaining R^1 represent H, alkyl (1-6C), alkenyl (2-6C) or aryl, each alkyl, alkenyl and/or aryl optionally containing a substituent that is in cationic form at physiological pH; and

wherein each of said formulas (1-20) may optionally contain one or more non-interfering substituents, and

wherein one or more C contained in a pyrrole ring may be replaced by O or S.

3. The expanded porphyrin or conjugate of claim 2, wherein at least one R^1 is


or

.

4. The expanded porphyrin or conjugate of claim 1 wherein the expanded porphyrin is Se2SAP.

5. A pharmaceutical composition for treating tumors which comprises as active ingredient the expanded porphyrin or conjugate of claim 1 in admixture with a physiologically acceptable excipient.

6. A method to treat tumors in a subject, which method comprises administering to a subject in need of such treatment an effective amount of the expanded porphyrin or conjugate of claim 1 or a pharmaceutical composition thereof.

7. A method to inhibit the transcription of a gene whose transcription is controlled by formation of a *c-MYC* type G-quadruplex, which method comprises contacting an environment in which said gene can be expressed with an amount of the expanded porphyrin or conjugate of claim 1 or a pharmaceutical composition thereof effective to modulate transcription.

8. The method of claim 7, wherein said gene is *c-MYC*.